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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,908	08/23/2001	Todd A. Thompson	9345.17121-CIP A	1957
26308	7590	06/09/2006	EXAMINER	
RYAN KROMHOLZ & MANION, S.C. POST OFFICE BOX 26618 MILWAUKEE, WI 53226			SMITH, RUTH S	
			ART UNIT	PAPER NUMBER
			3737	

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,908

Applicant(s)

THOMPSON ET AL.

Examiner

Ruth S. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/6/05, 10/11/05</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS dated 10/28/05, 5/8/06</u> . |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 8, 2006 has been entered.

Claim Rejections - 35 USC § 112

Claims 1-10,13-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It does not appear that the bubbles would rise into the well in figure 11 based upon the principle of gravity. It appears that buoyancy would cause the bubbles to rise.

Claim Objections

Claims 15-23 are objected to because of the following informalities: Claim 15 includes many limitations already set forth in claim 1. Claim 16 includes many limitations already set forth in claim 2. Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10,13-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10,12-27 of copending Application No. 09/938,307. Although the conflicting claims are not identical, they are not patentably distinct from each other because they involve an obvious broadening of the claims and the use of an additional diagnostic device would have been obvious in that such is a well known expedient in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10,13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talish et al ('070) in view of Peterson et al ('619) and Meyers. Talish et al disclose a system for applying ultrasound to the thoracic cavity of a patient comprising a housing 14,16, an ultrasound transducer positioned within the ultrasound assembly 16 and an assembly 20 to stabilize placement of the housing on the chest of the patient. The device of Talish et al would inherently include the features aperture size. As seen in figures 19-22, the applicator includes a housing that holds a fluid (gel), an ultrasound conducting interface, a contour-conforming interface with skin, a skirt, and a coupling assembly. Talish et al fails to specifically disclose the operating parameters of the ultrasound energy or the use of a circulating fluid. Peterson et al is just one example of many which disclose the operating parameters of the therapeutic ultrasound as set forth in the claims. The application of ultrasound at the levels provided would inherently result in the increase of blood flow. It would have been obvious to one skilled in the art to have modified Talish et al such that the operating parameters are as taught by Peterson et al in that such are well known operating parameters for therapeutic ultrasound which will not cause harm to the patient. With respect to claim 12, it is known to use a coupling agent to couple the ultrasound into the body without attenuation caused by it passing through air. It is well known to use circulating water as this agent as seen in Peterson et al. Therefore, it would have been obvious to one skilled in the art to have further modified Talish et al such that the gel is replaced by circulating water as the coupling agent. Such a modification merely involves the substitution of one well known type of coupling agent for another. Peterson et al further disclose the use of a bubble trap which is well known expedient in the art to prevent bubbles from interfering with the operation of the device. It should be noted that in the absence of any showing of criticality or unexpected results, the specific type of bubble trap used would have been an obvious matter of design choice, however, Meyers discloses an ultrasound device that includes a bubble trap comprising a well region 28

surrounding the transducer radiating surface. It would have been obvious to one skilled in the art to have further modified Talish et al such that it includes a region surrounding the radiating surface of the transducer that is used to collect bubbles formed in the coupling media. Such a modification merely allows the use of a bubble trap in the device of Talish as is well known in order to prevent the bubbles from interfering with the operation of the device. With respect to claims 4,5,7,8,19,20,22,23, the specific frequency selected would have been obvious to one skilled in the art without undue experimentation in order to achieve the desired effect. With regard to claim 9, multiple applicators can be used, therefore the assembly is capable of allowing another treatment device to be placed on the chest. In the absence of any showing of criticality, the specific type of additional device would have been an obvious design choice of known medical devices. It is well known in the art to monitor a patient's condition while undergoing treatment and the use of an EKG device is a well known expedient for providing such monitoring. Therefore, it would have been obvious to one skilled in the art to have used an EKG electrode along with the treatment device in that the use of diagnostic monitoring means along with treatment device is a well known expedient in the art to avoid harm from coming to the patient.

Response to Arguments

Applicant's arguments with respect to claims 1-10,13-23 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Ruth S. Smith', is positioned above the printed name.

Ruth S. Smith
Primary Examiner
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RSS